

	1 of 2	Impact Tools Operating/Rotating Hours Recommendations					
DOCUMENT NUMBER	CLASSIFICATION	DOCUMENT LEVEL	REVISION NUMBER	ISSUE DATE	PREPARED BY	APPROVAL	
GL-DRT-OEPS-L4-303	CONTROLLED	LEVEL 4	B	1/31/2022	Stephen Kidd	GLOBAL BUSINESS UNIT	

Mechanical and Hydraulic Impact Tools – Jars & Shock Tools

Rotating Hours: Rotating hours are defined as time the tool is rotated in string, such as drilling, reaming etc. It also includes any sliding hours that are accumulated during operations. **Rotating hours** must not be exceeded as per the limitations detailed in the tables below.

Operating Hours: Operating hours are defined as time the tool is below the rotary table, including tripping and circulating time etc., and inclusive of the rotating hours as defined above. An **Operating hours** limitation has been set at 400 hours for Dailey Impact Tools.

If it is likely that any of above limits may be exceeded during any operation, the Impact Tool must be changed for a replacement or contact Weatherford Representative for guidance before proceeding with continued use.

Weatherford has determined the following **rotation** hours for both mechanical and hydraulic impact tools for a range of tool and hole size combinations.

Drilling Operations

Nominal Tool size (in./mm)	12.00 304.8		9-1/2 241.30		7-3/4 to 8 203.20		6-1/2 to 7 165.10		6-1/4 158.75		4-3/4 120.65	
	Hole Size (in./mm)	Hours	Hole Size (in./mm)	Hours	Hole Size (in./mm)	Hours	Hole Size (in./mm)	Hours	Hole Size (in./mm)	Hours	Hole Size (in./mm)	Hours
Straight hole	26 660.4	250	16 406.40	250	9-7/8 250.83	250	8-1/2 215.90	250	7-7/8 200.03	250	5-7/8 149.22	250
	36 914.4		17-1/2 444.50		12-1/4 311.15		8-3/4 222.25		8-3/4 222.25		6-1/8 155.58	
	42 1066.8		22 558.80		17-1/2 444.50		12-1/4 311.15		9-7/8 250.83		7-7/8 200.03	
			26 660.40									
Directional hole	26 660.4	100	16 406.40	200	9-7/8 250.83	250	8-1/2 215.90	200	8-3/4 222.25	250	5-7/8 149.22	200
	36 914.4	N/A	17-1/2 444.50	150	12-1/4 311.15	250	8-3/4 222.25	150	9-7/8 250.83	200	6-1/8 155.58	150
	42 1066.8	N/A	22 558.80	100	17-1/2 444.50	100	12-1/4 311.15	150			7-7/8 200.03	150
			26 660.40	100								
Hard/abrasive formation	Same as directional hole		Same as directional hole		Same as directional hole		Same as directional hole		Same as directional hole		Same as directional hole	

	2 of 2	Impact Tools Operating/Rotating Hours Recommendations					OEPS
DOCUMENT NUMBER	CLASSIFICATION	DOCUMENT LEVEL	REVISION NUMBER	ISSUE DATE	PREPARED BY	APPROVAL	
GL-DRT-OEPS-L4-303	CONTROLLED	LEVEL 4	B	1/31/2022	Stephen Kidd	GLOBAL BUSINESS UNIT	

Temperature Limitations

Nominal Tool size (in./mm)	12.00 304.8	9-1/2 241.30	7-3/4 to 8 203.20	6-1/2 to 7 165.10	6-1/4 158.75	4-3/4 120.65
100° to 200°F (38° to 93°C)	250	250	250	250	250	250
200° to 300°F (93° to 149°C)	250	250	250	250	250	250
300° to 400°F (149° to 204°C)*	N/A	200	200	200	200	200
+400°F (+204°C)	N/A	100	150	150	150	150

*(see caution section)

Milling Operations

Nominal Tool size (in./mm)	12.00 304.8	9-1/2 241.30	7-3/4 to 8 203.20	6-1/2 to 7 165.10	6-1/4 158.75	4-3/4 120.65
Section Milling	N/A	100	100	100	100	100
Pilot Milling	N/A	100	100	100	100	100
All other Milling*		50	50	50	50	50

*(see caution section)

Caution:

If the tool has been run in temperatures above 300°F, then it must not be re-run again regardless of rotational and/operational hours. A replacement tool must be utilized for subsequent runs below rotary table.

After fishing operations, acid treatments the Impact tool shall be delivered to Weatherford service center for repair, regardless of the actual operating hours.

For milling operations other than types specified in table above please contact Engineering or Global Product Line Support to determine recommended limitations dependent on operational conditions.

Failure to adhere to these recommendations may result in detrimental performance of the Impact Tool. Weatherford will not be held liable for detrimental performance or consequential loss, damage, or harm, if this guidance is not followed.